CAFETERIA FOOD PAYMENT USING QR CODE

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SUPERVISOR'S DECLARATION

I hereby declare that I have checked this report and in my opinion, this report is sufficient in term of scope and quality for the award of the Bachelor of Computer Science (Computer Systems & Networking).

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STUDENT'S DECLARATION

I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang or any other institutions.

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ABSTRAK

Pengurusan kewangan merupakan salah satu perkara yang penting bagi setiap orang terutama sekali dikalangan pihak remaja. Kebanyakkan remaja mempunyai masalah dalam pengurusan wang pembelajaan mereka, lebih-lebih lagi apabila mereka di alam pelajaran ke peringkat yang lebih tinggi. Pihak remaja menghadapi masalah kekurangan wang pembelanjaan adalah disebabkan mereka tidak mahir dalam pengurusan wang pembelanjaan mereka dengan betul, wang simpanan tidak mencukupi, ataupun pembelian barangan keperluan serta pembelajaran yang melebihi dari anggaran pembelian mereka. Maka pembayaran dengan menggunakan QR codes sistem telah di kemukakan bagi membantu pihak remaja dalam pengurusan wang pembelanjaan mereka dengan lebih baik yang dipanggil Cafeteria Food Payment System atau singkatannya CFPayment sistem. Sistem ini berfungsi untuk membantu pihak remaja dalam pengurusan wang pembelanjaan mereka secara alam maya agar mereka mempunyai wang simpanan untuk pembelanjaan terlebih dahulu sebelum mereka menghadapi masalah wang tidak mencukupi untuk pembelanjaan. Selain itu, sistem ini juga turut membantu pihak remaja dalam pengasingan wang mereka dari segi pembelian dan juga pembelanjaan. Objektif sistem tersebut adalah untuk membantu pihak remaja bagi pengurusan wang dengan lebih teratur, menggelakkan mereka menghadapi masalah wang tidak mencukupi untuk pembelanjaan dan wang mereka tertinggal atau terlupa untuk dikeluarkan daripada mesin atm. Maka demi menyelesaikan masalah tersebut, sistem ini telah dikemukakan untuk dibangunkan bagi memenuhi cadangan yang telah dikemukakan untuk membantu pihak remaja dalam pengurusan wang pembelanjaan mereka dengan lebih teratur dan sistematik. Hasil yang diharapkan daripada sistem ini adalah agar pihak remaja dapat menguruskan wang pembelanjaan mereka dengan lebih baik agar dapat menggelakkan masalah wang pembelanjaan mereka yang dihadapi sepanjang mereka di alam pelajaran peringkat yang lebih tinggi.

ABSTRACT

Financial management is one of the important things for everyone, especially among students. Most teens have problems managing their money, especially when they are in higher education. Adolescents are faced with a shortage of spending money because they are not skilled in managing their money properly, insufficient savings, or purchase of essentials and learning materials that exceed their estimated purchases. Payment by using the system QR codes has been raised to help the adolescents in managing their spending money better called the Cafeteria Food Payment System or the CFPayment system. This system works to help the adolescents in managing their spending money virtually so that they have saved on their spending before they face inadequate money for spending. In addition, the system also helps students in exile in terms of purchasing and spending. The objective of the system is to help adolescents manage money more efficiently, preventing them from having enough money for their expenses and their money left behind or forgetting to be removed from ATM machines. So to solve this problem, it has been proposed to be developed to meet the recommendations put forward to assist the youth in the management of their spending money more regularly and systematically. The expected result of this system is that the teens can manage their spending money better in order to avoid spending money problems they faced during their lessons in nature at a higher level.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

In the ever-increasing technology era, various technologies have been built to meet the needs, wants and satisfaction of all, especially among teens. This technology can be said almost everyone has a smartphone regardless of age and it becomes a necessity nowadays. Their phones are only used for long distance communications, but in the near future, the smartphones have been equipped with a variety of systems, facilities and applications to meet their needs.

Smartphones can be categorized between one of the key requirements to teens, as well as easy to carry anywhere, regardless of the time, place or where they are, it is also a versatile tool for communication, data storage, information search and more can help students.

However, if viewed from a different angle, there are few distinct advantages that can be seen, for example buying a trade. Smartphones are definitely the system's wisdom used to provide facilities including online purchases, but facilities still cannot help this problem especially for students in spending such as food or beverages.

Thus, the Cafeteria Food Payment Using QR Codes system or better known as CFPayment has been proposed to help students in managing money wisely for their spending in universities. The main aim of the proposed system is to replace the cash needed to be brought to the market with cash in the virtual world. The system is also suggested as it is installed on smartphones like other applications and added with QR Codes scan application to signal and get a response. Thus, smartphones have been used by various ages and races, incorporating this unique CFPayment system which is suitable for use by various levels of society.

In order to function and get better performance, this proposed device will make it ideal for teens to help with better and safe money handling. QR Codes is a specially

designed application for students as current smart cards can be easily broken. The QR Codes system also has a variety of types and types that are suitable for use as SQRC systems that are able to store information in secret as well as in management in the case. It also avoids if teens are left out or lose their money and with the system, they can be brought anywhere as they bring their own smartphones. In fact, teens are extremely active in the use of smartphones regardless of where they are. That is one of the major reasons CFPayment has been proposed to facilitate their use for easier purchase of smart card usage. Students only need to register their account number upon registration of the system according to the type of bank they want to register, as each of their purchases will be deducted from their account to facilitate and save time for them to manage the transaction.

1.2 Problem Statement

Generally, students will use cash as an asset for a purchase, but some issues will make them complacent and their money shortage in something. Most of the teens will feel tired and forget about their spending money and just buy something without first knowing whether it needs or will and regardless of the price of the item and their budget at any one time.

The main problem that often occurs among students is they often have a shotage of cash for their food expenses, as students do not practice savings and often use their money to buy something according to their wants and satisfaction regardless of the budget and price of the item. Then this will cause students not to spend as usual for basic expenses like food and drink.

In addition, time constraints are also a major problem for students because if students do not have enough cash to buy food, they need to spend some time finding an ATM machine to take about spending their money. This can be considered a problem because there are a small number of teens who have little time to relax and buy food, but not enough time for them to withdraw their money at ATM machines and chances are they cannot buy food and rest even if only briefly.

Time wastage can also be an issue for students as teens do not have small money while spending, while at the counter payment side also do not have enough money left, it will take a bit of time for teens even though salesperson to make a cash advance before the sale can continue as usual.

The last problem that is often heard is the problem of losing money unknowingly. Students who are being careless and lackadaisical in the storage of their money, would cause them to forget where they put their money or they do not realize that the money they have fallen or dropped in a place before they realized the events that had happened to them.

Therefore CFPayment system has been proposed to solve the problems faced by students. These issues are often heard at any university area, so the system aims to facilitate teens who often hold and use their smartphones regardless of time, place and time as an app for them to spend without them worrying about losing money, not It has enough time to withdraw money from an ATM machine or less money due to bad money management. At the same time, they can learn a bit about money management for their basic needs as students.

1.3 Objective

The objective of this project are:-

- To study on how system CFPayment used for students in the process of purchases.
- To design and develop the CFPayment system for student to pay food.
- To test usability functions of CFPayment system using QR Codes for student.

1.4 Scope

The main scopes of the project are:-

- To design and develop the android application and web base.
- The target area for this research is for students to make food payers in the cafeteria.
- For campus community UMP.

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